Atty. Docket No.: LeA 36 075

Peters, et al.

Amended Claims (Attorney Docket No. LeA 36 075)

1. (Original) A method for preparation of Interleukin-4 or muteins of Interleukin-4 by recombinant expression comprising (a) expression in inclusion bodies, (b) disrupting the cells and separating the inclusion bodies, (c) washing inclusion bodies so obtained, (d) solubilizing the inclusion bodies by denaturation (e) renaturating the expression product and (f) purifying the expression product characterized in that the inclusion bodies are washed (c) with a buffer containing a detergent which effectively solubilizes lipids bound to the surface of the inclusion body or lipids contained in cell wall fragments.

- 2. (Currently amended) A <u>The</u> method according to claim 1 wherein the detergent for washing the inclusion bodies is a non-ionic detergent, a ionic surfactant or a zwitterionic detergent.
- 3. (Currently amended) A <u>The</u> method according to claim 1 wherein the detergent is a zwitterionic detergent selected from the group CHAPS, CHAPSO, desoxycholate and the zwittergent series (N-alkyl-N,N-dimethyl-3- ammonio-1-propanesulfonate).
- 4. (Currently amended) A <u>The</u> method according to any of claims claim 1 to 3 wherein the washing buffer for the inclusion bodies is a buffer which maintains the pH between 7 and 10.
- 5. (Currently amended) A The method according to any of claims claim 1 to 4 wherein the washing buffer additionally contains a chelating substance.
- 6. (Currently amended) A <u>The</u> method according claim 5 wherein the a chelating substance is selected from the group ethylenediamintetraacetic acid (EDTA), ethyleneglycol-O,O' bis-(2-aminoethyl)-N,N,N',N'-tetraacetic acid (EGTA), nitriloacetic acid (NTA) or trans-1,2-diamino-cyclohexan-N'N,N',N'- tetraacetic acid (CDTA).
- 7. (Currently amended) A <u>The</u> method according to claim 1-6 wherein the recombinant protein is Interleukin-4 R121D Y124D.
- 8. (Currently amended) The method according to any one of claims claim 1 to 7 wherein the renaturation (e) is done by dialysis, diafiltration or dilution optionally in the presence of artificial chaperones.

Peters, et al. Atty. Docket No.: LeA 36 075

9. (Original) The method according to claim 8 wherein the renaturation (e) is done in the presence of artificial chaperones.

10. (Currently amended) The method according to any one of claims claim 1 to 9 wherein the purification (f) is done by chromatography.